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| 10/710,329   | 07/01/2004  | David S. Bonalle     | 70655.2700          | 4328             |
| 20322  | 7590        | 09/19/2006           | EXAMINER            |                  |
| SNELL & WILMER<br>400 EAST VAN BUREN<br>ONE ARIZONA CENTER<br>PHOENIX, AZ 85004-2202 |             |                      | WALSH, DANIEL I     |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2876                |                  |

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/710,329

Applicant(s)

BONALLE ET AL.

Examiner

Daniel I. Walsh

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7-04, 8-04</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

### **DETAILED ACTION**

1. Receipt is acknowledged of the IDS received on 8-5-04 and 7-1-04.

#### ***Specification***

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-16 and 20-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black (US 6,925,565) in view of Black (US 2005/0169504), hereinafter Black '504, in view of Black (US 2006/0005042), hereinafter Black '042.

Re claim 1, Black teaches a transponder (smartcard) configured to communicate with a reader, a reader configured to communicate with the system, a biometric sensor to detect a biometric sample, the sensor configured to communicate with the system (FIG. 1A). Though silent to a verification device to verify the sample, the Examiner notes that a transaction is authorized upon verification of the sample. Therefore, at the time the invention was made, it would have been obvious to have a verification device in order to verify the sample as part of the authentication (security).

Black fails to teach a retina scan as a biometric.

The Examiner notes that there are various types of biometrics to authenticate individuals. Specifically, Black '504 teaches the use of a facial scan through facial imaging (camera) (paragraph [0020]), but it silent to retina samples.

Black '042 teaches the use of retina as a facial image biometric (paragraph [0014]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black with those of Black '504 and Black '042.

One would have been motivated to do this in order to have a different type of security biometric based on system constraints, preferences, etc.

Re claim 2, the Examiner notes that the sensor communicates with the system via at least one of a transponder, reader, and network (FIG. 1A of Black).

Re claim 3, it is understood that the biometric sensor is configured to facilitate a finite number of scans (one for example) in order to receive a sample (namely one).

Re claim 4, FIG. 5A+ (of Black) shows that the biometric sensor logs at least one of a detected sample, processed sample, and stored sample, as its stored.

Re claims 5-6, Black teaches (col 6, lines 56+) that the customer record can be stored locally or remotely. The Examiner notes that though Black is silent to a datapacket stored on a database, Black teaches that the customer record can include biometric information, user information, etc. (FIG. 5A+ for example). Therefore, the Examiner notes that it would be within the skill in the art for such a collection of data can be interpreted as a data packet. It would have been obvious to store such information on a database, in order to have a well known and conventional means of storing data for quick retrieval and organization. It has been discussed above that the data can be stored remotely or locally. Accordingly, it would have been obvious to one of ordinary skill in the art to store it on the transponder or a remote device based on security needs.

Re claim 7, it has been discussed above that samples are received and stored for providing security/authentication. It would have been obvious that the samples would be received by an authorized receiver in order to ensure security and reliability.

Re claim 8-10 though silent to the claimed details, the Examiner notes that it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have the retinal device with an infrared source to detect/verify blood vessel patterns, as a means to authenticate a sample, as is known in the art, and to reduce noise.

Re claim 11, though silent to detect and verify pupil dilation/eyeball pressure/body heat, the Examiner notes that such means are an obvious expedient to authenticate a living sample, and are well known in the art, specifically in facial recognition where pupil dilation can be a parameter that is measured and verified.

Re claim 12, the Examiner notes that the proffered sample is compared to a stored/registered sample to see if there is a match (abstract of Black).

Re claim 13, it has been discussed above that a comparison is performed (electronically). The Examiner notes that it would have been obvious to one of ordinary skill in the art to use a microprocessor/controller/processor (interpreted as a protocol/sequence controller) to electronically perform the comparison, as the electronic (automated) means to quickly and reliably perform the comparison, as is conventional in the art.

Re claim 14, the Examiner notes that as a sample is stored, it's interpreted as registered.

Re claim 15, Black teaches that a customer's account is linked to the biometric data, and can be used for payment and is linked to a credit or debit account (abstract, col 6, lines 46+).

Re claim 16, the Examiner notes that it is obvious that the system of Black would be used by a plurality of customers. As such, it would have been obvious that different people have different samples (unique), which would be associated with their different accounts.

Re claim 20, though Black is silent to the sensor providing notification upon detection of a sample, the Examiner notes that it is well within the skill in the art to provide notification that a sample has been detected, in order to provide indication to the user, that the sample was received and they don't have to keep offering a sample. As Black indicates when a sample has been authorized (transaction allowed) it would have been obvious to indicate when the sample is

read/detected as a means to provide guiding information to the user. Additionally, the Examiner notes that the mere authorization of a transaction can be broadly interpreted as providing notification upon detection of a sample because authorization cannot occur unless the sample was detected.

Re claim 21, it has been discussed above that the device facilitates a financial transaction.

Re claims 22 and 34, though silent to secondary security procedures, the Examiner notes that such procedures such as PINs, codes, passwords, etc. are well known and conventional in the art. One would have been motivated to use such procedures for increased security.

Re claim 23, Black teaches a method for facilitating biometric security in a transponder (smartcard)/reader system comprising providing a biometric to a biometric sensor communicating with the system to initiate verification of a biometric for facilitating authorization of a transaction (abstract).

Black is silent to a retina scan as the biometric sample.

Black '504 teaches such facial limitations as discussed above, but is silent to a retina.

Black '042 teaches such limitations (retina) as discussed above.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black with those of Black '504 and Black '042.

One would have been motivated to do this in order to have an alternative biometric means to authenticate a user, based on system constraints, preferences, etc.

Re claim 24, the Examiner has interpreted the storing of the sample with the system as an authorized sample receiver.

Re claim 25, registering includes proffering a biometric (abstract, FIG. 5A of Black).

Re claim 26, the limitations have been discussed above re claim 8.

Re claim 27, Black teaches that a sample is stored and that proffered samples are compared and verified to complete a transaction (abstract).

Re claim 28, Black teaches the step of proffering a biometric to a sensor communicating with the system to initiate verification, as discussed above. As discussed above, Black teaches that the information can be stored on the transponder itself or remotely, depending on the desired security. Though silent to a database, a database is an obvious expedient as discussed above. Accordingly, it would have been obvious to process database information contained in at least one of the transponder, reader, sensor, server, and reader system as a means to authenticate/verify a user.

Re claim 29, Black teaches comparing the proffered sample with stored sample (abstract).

Re claims 30, the limitations have been discussed above, re claim 12.

Re claims 31-32, though silent to the particulars of the comparison, the Examiner notes that such aspects of retina scanning are well known and conventional in the art for authenticating samples. One would have been motivated to do so to ensure the samples are valid.

Re claim 33, the Examiner notes that as the system is used with more than one user (therefore more than one sample) it would have been obvious to detect/process/store a second sample (of additional users).

Re claim 34, the limitations have been discussed above.

Re claim 35, Black teaches a method of facilitating biometric security in a transponder (smartcard) reader transaction system comprising detecting a proffered biometric at a sensor communicating with the system to obtain a proffered sample, verifying the sample, and



authorizing a transaction to proceed upon verification of the sample (abstract, and as discussed above).

Black is silent to a retina scan as the biometric sample.

Black '504 teaches such limitations as discussed above, but is silent to a retina.

Black '042 teaches a retina as discussed above.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black with those of Black '504 and Black '042.

One would have been motivated to do this in order to have an alternative biometric means to authenticate a user, based on system constraints, preferences, etc.

Re claim 36, Black teaches that the sample is detected at a sensor configured to communicate with the system via one of a transponder/reader/network (FIG. 1A-1C).

Re claim 37, the limitations have been discussed above re claim 8.

Re claim 38, Black teaches detecting/storing/processing the sample (abstract).

Re claim 39, the Examiner notes that it would have been obvious to receive a finite number of sample during a transaction (abstract), namely, one, for example, for a transaction.

Re claim 40, the examiner notes that it is obvious that the samples are logged/stored at least temporarily, in order for them to be verified (stored in a buffer for example during comparison), see claim 4 above. Additionally, the Examiner notes that storing/logging signatures, transaction details, signatures associated with a transaction (more permanently than in a buffer) are well known and conventional in the art for record keeping purposes/security.

Re claim 41, as discussed above, it would have been obvious to one of ordinary skill in the art to detect/process/store a second sample, when the system is used by different people with different accounts and samples.

Re claim 42 and 44, the Examiner notes that such security procedures are well known and conventional in the art for ensuring the authenticity of samples (Applicants own specification), and have been discussed above re claims 9 and 10. One would have been motivated to use such procedures in order to ensure authentic samples.

Re claim 43, the comparison of a proffered sample to a stored/registered sample has been discussed above.

Re claim 45, the Examiner notes that the proffered biometric is indeed compared with a sample of at least one of a criminal, terrorist, and card member, as the sample is compared to a current card members sample, to authorize the transaction.

Re claim 46, verifying the sample using information contained on one of a local database/remote database/third party controlled database would have been an obvious expedient in instances where the data is stored remote from the transponder. The biometric would be verified by using information contained in a database, as a preferred means to organize data for efficient and easy storage and retrieval (remote or local), especially in light of FIG. 5A+ of Black which shows that the storage can occur on the card/transponder or remotely. Such a selection could be made based on security, costs, system constraints, etc.

Re claim 47, the verification of a sample using a protocol/sequence controller (interpreted as a processor) has been discussed above.

4. Claims 8-11, 26, 31, 32, 37, 42, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Black '504/Black '042, as discussed above, in view of Togino (US 2004/0202354)

The teachings of Black/Black '504/Black '042 have been discussed above.

Black/Black '504/Black '042 are silent to verifying and verifying the claimed retina characteristics/features.

Togino teaches the claimed limitations (paragraph [0003, 0043, and 0045]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Black '504/Black '042 with those of Togino.

One would have been motivated to do this in order to verify and accurately verify users/samples.

Though silent to the limitations of pupil dilation (claims 11), the Examiner notes that it is well known and conventional to account for pupil dilation in facial recognition, as a parameter that is monitored and verify to authenticate an individual (see related prior art).

5. Claims 16, 33, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Black '504, as discussed above, in view of Martizen et al. (US 2002/0191816).

The teachings of Black/Black '504/Black '042 have been discussed above.

Black/Black '504/Black '042 is silent to different samples (of the same person) associated with different one of personal information, credit card information, etc. as claimed.

Martizen et al. teaches different registered biometric samples are associated with different personal information (different samples with different accounts) (FIG. 6A).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Black '504/Black '042 with those of Martizen et al.

One would have been motivated do to this to permit multiple accounts to be security accessed with different biometric samples, for user convenience and security.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Black '504/Black '042/Martizen et al., as discussed above, in view of Moebs et al (US 2005/0065872).

The teachings of Black/Black '504/Black '042/Martizen et al. have been discussed above.

Black/Black '504/Black '042/Martizen et al. are silent to primary and secondary associating.

The Examiner notes that such associating is well known in the art (line of credit, for example). Specifically, Moebs et al. teaches that a customer can avoid overdraft by preauthorizing the financial institution to tie the customers' checking account to one or more of the customers other accounts (paragraph [0017]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Black '504/Black '042/Martizen with those of Moebs et al.

One would have been motivated to do this in order to provide for overdraft protection, for example.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Black '504/Black '042 in view of Teicher (US 6,257,486).

Black/Black '504/Black '042 is silent to mutual authentication upon verification of the biometric sample.

The Examiner notes that mutual authentication is well known and conventional in the art, as a security measure, to ensure that a valid reading device and device are communicating. It would have been obvious to one of ordinary skill in the art to authenticate upon verification of the sample, in order to ensure that the transponder and reader are authentic and authorized to communicate with each other. Specifically, Teicher teaches a contactless smart card that being mutual authentication after an input (PIN) is entered (col 7, lines 35+).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Black '504/Black '042 with those of Teicher.

One would have been motivated to do this in order to employ well known security measures.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Black '504/Black '042 in view of Goodman (US 2002/0043566).

The teachings of Black/Black '504/Black '042 have been discussed above.

Black teaches that the transaction is blocked when the biometrics do not match, as is conventional in the art, but Black is silent to deactivation upon rejection of the sample.

The Examiner notes that it is well known and conventional in the art for card to be disabled, as a security measure, if a predetermined amount of failed attempts are detected, for example. Specifically, Goodman et al. teaches deactivation of a card if a predetermined amount of incorrect PIN attempts are detected (paragraph [0029]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Black '504/Black '042 with those of Goodman et al.

One would have been motivated to do this in order to increase system security.

Though Goodman et al. is silent to a biometric input, the Examiner notes that Goodman et al. is relied upon for teaching disabling of access when a matching input is not received. It would have been obvious to disable the transponder when biometrics don't match (biometrics replacing PIN input, as a more secure alternative).

9. Claims 22 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Black '504/Black '042, as discussed above, in view of Black (US 2005/0122209).

The teachings of Black/Black '504/Black '042 have been discussed above.

Re claims 21 and 34, Black/Black '504/Black '042 is silent to secondary security procedures.

Black '209 teaches such procedures through signature verification (abstract). Black '209 teaches storing of digital and electronic signature for record keeping purposes (paragraph [0125]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Black '504/Black '042 with those of Black '209.

One would have been motivated to do this for increased security and record keeping purposes. Re claims 4 and 40, Black '209 teaches logging samples (paragraph [0125]).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: see attached PTO-892, specifically noting Kita (6,703,918) which teaches a transponder/reader transaction system, Kondo et al. (US 2003/0152252) which teaches pupil dilation, Price-Francis (US 5,815,252) which teaches a retinal sensor, Murakami et al. (US

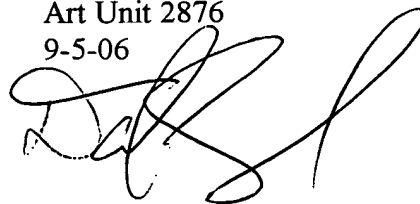
6,483,929) which teaches a low intensity/infrared sensor, Black (6,307,956) which teaches facial imaging to identify persons, Prokoski (US 6,496,594) which teaches facial scan sensors to detect and verify the claimed characteristics including nodal points (col 12, lines 28+), Glass (US 6,332,193) which teaches iris scan sensors, and Stark et al. (US 6,116,736) for pupil dilation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel I Walsh  
Examiner  
Art Unit 2876  
9-5-06



**DANIEL WALSH  
PRIMARY EXAMINER**